

Abstract

5 The invention relates to a magneto-inductive method for determining the flow rate of a medium flowing through a measuring tube (2) in the direction of the measuring tube axis.

10 In order to be able to detect a coating formation on a measuring electrode early and with a high degree of certainty, a test pulse (U_p) of defined pulse length (t_p) is issued to the measuring electrode (3, 4); at least one signal in response to the test pulse (U_p) is determined at at least two measuring points in time (t_1, t_2), wherein the measuring points in time (t_1, t_2) lie in a time window ($t_{\text{end}} - t_{\text{begin}}$), which is so selected that no predictable disturbance signals occur on the measuring electrode (3, 4) in this time window ($t_{\text{end}} - t_{\text{begin}}$). On the basis of the response signal determined in the measuring points in time (t_1, t_2), the relaxation time (τ), or the length of time until the reaching of a predetermined state of discharge (U_i), of the measuring electrode (3, 4) is determined; on the basis of the determined relaxation time (τ), or on the basis of the length of time until the reaching of the defined state of discharge (U_i), of the measuring electrode (3, 4), a malfunctioning of the measuring electrode (3, 4) is detected, or becomes detectable.

(Fig. 2)